

1.1 Introduction of IUMRS by IUMRS Founding President Prof. R. P. H Chang

It is a great honor for me to write this introduction to the document commemorating the 30th Anniversary of the founding of the International Union of Materials Research Societies (IUMRS). IUMRS was founded in 1991 as a formal organization representing a number of international materials research societies but it has its origins further back in time in a committee operating in 1984/5. An excellent account of the history of IUMRS is given below by John Baglin and Paul Siffert.



Prof. R. P. H Chang Northwestern University, USA

The "**Mission**" of the IUMRS is to serve and lead, through research and education, the global materials community in support of a sustainable world by processing and regeneration new materials for all citizens.

The founding members of IUMRS were societies from the United States (MRS), Europe (E-MRS), MRS-Japan, Chinese MRS, Mexican-MRS, MRS-Taiwan, MRS-India and Australian-MRS. These were joined later by MRS-Russia, MRS-Singapore, MRS-Korea, MRS-Brazil, MRS-Argentina, African-MRS and, most recently MRS Indonesia, and MRS-Thailand. These societies have contributed to this document on their histories and planed for the future, with many pictures taken during meetings hosted by them.

There are number of people who deserve special recognition for their leadership in the early history of IUMRS. They include Woody White, Elton Kaufmann, Masao Doyama, Paul Siffert, John Balance, John Baglin, and many others. In the mid to late eighties, MRS played a key role in hosting annual meetings in Boston to discuss and debate how the to-be-established Union should function. It was finally decided that all adhering bodies would function independently but work closely to promote the mission of providing services and leadership to the global materials community both in research and education.

To bring the global materials community together, it was decided that a series of International Conferences on Advanced Materials (ICAM) and Electronic Materials (ICEM) was to be launched. This was done under the leadership of Masao Doyama in Japan with the support of the MRS and E-MRS starting in 1988. The success of these meeting further propelled the accelerated formation of the IUMRS in 1991.

Since then, other IUMRS meetings such as International Conference in Asia (ICA), and more recently Materials World Summit have been launched with great success. These meetings, in addition to the annual meetings of each individual adhering body, have increased significantly the communication in materials research and education around the world. In 2005, under the leadership of IUMRS president, Zhou Lian, it successfully applied to the International Council for Science (ICSU) for membership as one of the only 29 members.



In parallel to the development of strong communications among materials researchers worldwide, members of the adhering bodies of the IUMRS have also been working with their respective funding agencies to launch multi-lateral research funding initiatives. During a period of 15 years, the National Science Foundation in the US and its counterparts around the world have signed agreements to support joint research programs among materials researchers from all parts of the world. This was done under the Materials World Network Program started in 1995. Through the support of this Program, many international workshops were held and they have also resulted in the establishment of new societies, such as the Brazilian MRS and the African MRS.

Addressing the Future

In retrospect, IUMRS has already fulfilled a large part of its original vision of services to the world materials community but where will it go from here and what are its responsibilities? As we move into the 21st century, we see that the world has greatly changed. Within this century, the world population will reach nearly nine billion. In addition, it is predicted that the supply of oil will peak in about thirty years and then decrease rapidly thereafter. Over the next couple of centuries, it is anticipated that coal will still provide at least one half of the world's energy. Unless new technology is developed, the current rate of coal burning may accelerate global warming and climate change. To provide enough energy, food, water, while protecting the health of all citizens, is such a big challenge that requires the co-operation and collaboration of all nations. Materials research must play a very strategic central role in solving these big global problems. IUMRS is well positioned to help and lead in addressing such challenges. During the past couple of years the General Assembly (GA) of the IUMRS has had many discussions on future initiatives that the IUMRS needs to launch in collaboration with other Unions and members of the ICSU. It is pretty clear that global problems need global resources, talents, expertise and above all co-operation to solve.

As of 2011, the immediate plan of the IUMRS is to launch a Global Materials Network (GMN). The GMN has three main strands:

- 1.A Network for young materials researchers world-wide through interaction both in real and cyber-space. Young researchers need to be empowered to take lead to solve global problems facing their future.
- 2.IUMRS, working with other Unions of the ICSU, will establish a Materials Council to develop policies for energy, environment, and education.
- 3.Building on the success of the Materials World Network, IUMRS will further lead the global efforts in research and education relating to energy, environment, health, security and sustainability.

To launch the first initiative, an IUMRS - International Conference of Young Researchers on Advanced Materials was organized by the Materials Research Society of Singapore, 1-6 July, 2012, in Singapore. The related cyber-infrastructure has been under development. The second initiative is being planned.

The purpose of this Booklet is to commemorate the 30th anniversary of the founding of IUMRS and to give the presidents of the Adhering Bodies an opportunity to tell the history of their societies and describe their leadership and participation in the IUMRS.

I want to thank Mike Driver who has overseen the production of part of this document, and the staff of MRS, particularly Betsy Fleischer and Mary Kaufold for providing some of the contents.

I believe the IUMRS is truly a unique world materials organization which highly values the leadership and contribution of its members. It is now positioned to further strengthen its collective power to help provide solutions to the greatest global problems facing all mankind. IUMRS welcomes your participation in all of its activities.

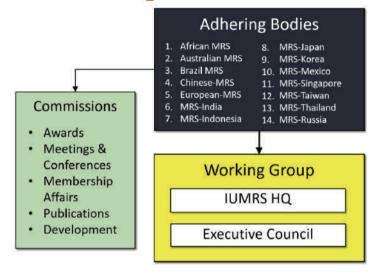
R. P. H. (Bob) Chang IUMRS Founding President August 2019

© R. P. H. (Bob) Chang, Professor. Department of Materials Science and Engineering, Northwestern University, USA.

https://www.mccormick.northwestern.edu/research-faculty/directory/profiles/chang-robert.html

1.2 Structure of IUMRS

IUMRS Organization Chart



1.3 Recent IUMRS officers

2019-2020:

- 1. Yafang Han, President 2019-2020, from Chinese-MRS
- 2.Soo Wohn Lee, Immediate Past President 2019-2020, from MRS-Korea
- 3.Rodrigo Martins, 1st Vice President 2019-2020, from European-MRS
- 4. Yuen Peng Feng, 2nd Vice President 2020-2021, from MRS-Singapore
- 5.Jim S. Williams, Secretary 2019-2020, From Australian-MRS
- 6. Naoki Kishimoto, Treasurer 2020-2021, from MRS-Japan

2021-2022:

- 1. Rodrigo Martins, President 2021-2022, from European-MRS
- 2. Yafang Han, Immediate Past President 2021-2022, from Chinese-MRS
- 3.Osvaldo N. Oliveira, 1st Vice President 2021-2022, from MRS-Brazil
- 4. Yuen Peng Feng, 2nd Vice President 2020-2021, from MRS-Singapore
- 5.Jim S. Williams, Secretary 2021-2022, from Australian-MRS
- 6. Naoki Kishimoto, Treasurer 2020-2021, from MRS-Japan



1.4 IUMRS Commission members

2019- 2020

| Commission | Members | Role | Emails |
|----------------|----------------------------------|-----------------------------------|--------------------------------|
| Awards (6) | R.P.H. (Bob) Chang | Chair | rphchang@gmail.com |
| | Rodrigo Martins (E-MRS) | IUMRS Global Leader/Service Award | rm@uninova.pt |
| | B.V.R. Chowdari (MRS-S) | IUMRS-MRSs Young Researcher Award | chowdari@mrs.org.sg |
| | Nobuhiro Matsushita (MRS-J) | IUMRS Somiya Award | |
| | Sharath Sriram (A-MRS) | member | sharath.sriram@rmit.edu.au |
| | Jian Ji (C-MRS) | member | jijian@zju.edu.cn |
| Meetings (7) | Osvaldo N. Oliveira (MRS-B) | Chair | chu@ifsc.usp.br |
| | Naoki Kishimoto (MRS-J) | member | kishin@fa3.so-net.ne.jp |
| | George Kirakidis (E-MRS) | member | kiriakid@iesl.forth.gr |
| | Evan Williams (MRS-S) | member | williamse@imre.a-star.edu.sg |
| | Soo Wohn Lee (MRS-K) | Ex-official member | ecomaterials@sunmoon.ac.kr |
| | Jim Williams (A-MRS) | EC member as Secretary | Jim.Williams@anu.edu.au |
| | Paul Horng (MRS-T) | member | jlhorng@itri.org.tw |
| | Ying Wu (C-MRS) | Chair | wuying@atmcn.com |
| | Yafang Han (C-MRS) | Ex-official member | yfhan@buaa.edu.cn |
| Publications | Duan Weng (C-MRS) | member | duanweng@tsinghua.edu.cn |
| (6) | Wuzong Zhou (UK) | member | wzhou@st-andrews.ac.uk |
| | George Zheng Chen(UK) | member | George.Chen@nottingham.ac.uk |
| | Chengtie Wu (C-MRS) | member | chengtiewu@mail.sic.ac.cn |
| | Tao Deng (C-MRS) | Chair | dengtao@sjtu.edu.cn |
| | Peter Wellmann (E-MRS) | Co-chair | peter.wellmann@fau.de |
| | Byungha Shin(MRS-K) | member | byungha@kaist.ac.kr |
| | Giovanni Marletta (E-MRS) | member | gmarletta@unict.it |
| Development | Elton N. Kaufmann (USA) | member | eltonk@anl.gov |
| (10) | Leticia Torres -Martinez (MRS-M) | member | lettorresg@yahoo.com |
| | Tsong-Pyng Perng (MRS-T) | member | tpperng@mx.nthu.edu.tw |
| | Yudi Darma (MRS-Ina) | member | yudi@fi.itb.ac.id |
| | Tim White (MRS-S) | member | tjwhite@ntu.edu.sg |
| | P. S. Anil Kumar (MRS-I) | member | anil@physics.iisc.ernet.in |
| Membership (8) | Yuan Ping Feng (MRS-S) | Chair | phyfyp@nus.edu.sg |
| | John Baglin (USA) | member | baglin@us.ibm.com |
| | Chennupati Jagadish (A-MRS) | member | Chennupati.Jagadish@anu.edu.au |
| | Do Kyun Kwon (MRS-K) | member | dkwon@kau.ac.kr |
| | Ian W. Boyd (E-MRS) | member | Ian.Boyd@brunel.ac.uk |
| | Santi Maensiri (MRS-Thai) | member | santimaensiri@g.sut.ac.th |
| | T. T. Song (MRS-T) | member | TTSONG@itri.org.tw |
| | Ziqiang Dong (C-MRS) | member | zqdong@shu.edu.cn |

Chapter 1 About IUMRS

(2021-)

| Commission | Members | Role | email |
|----------------|--------------------------------------|---|--|
| Awards (6) | Tim White | Chair, and Young Researcher Award | tjwhite@ntu.edu.sg |
| | Rodrigo Martins (E-MRS) | IUMRS President and Global Leader Award | rm@uninova.pt |
| | Monica Cotta (MRS-B) | member (F) | monica@ifi.unicamp.br |
| | Nobuhiro MATSUSHITA(MRS-J) | IUMRS Somiya Award | Need to check status and email address |
| | Sharath Sriram (A-MRS) | member and young researcher | sharath.sriram@rmit.edu.au |
| | Jian Ji (C-MRS) | member | jijian@zju.edu.cn |
| Meetings (9) | Soo Wohn Lee (MRS-K) | Chair | ecomaterials@sunmoon.ac.kr |
| | Samuel Chigome(African MRS) | member and President of African MRS | SChigome@bitri.co.bw |
| | Benjamin Agyei-Tuffour (African MRS) | member and young researcher | bagyeituffour@gmail.com |
| | Sanjay Mathur (Europe) | member | sanjay.mathur@uni-koeln.de |
| | Claudia Gutierrez Wing (MRS-M) | member and past President of MRS-M (F) | claudia.gutierrez@inin.gob.mx |
| | Evvy Kartini (MRS-Ina) | member and President of MRS-Ina (F) | evvy.kartini@gmail.com |
| | Ieda Santos (MRS-B) | member (F) | ieda@quimica.ufp.br |
| | Saskia Schmmel (E-MRS) | member and young researcher (F) | sas.schimmel@imass.nagoya-u.ac.jp |
| | Paul Horng (MRS-T) | member and former IUMRS Treasurer | jlhorng@itri.org.tw |
| | Ying Wu (C-MRS) | Co-chair | wuying@atmcn.com |
| | Yafang Han (C-MRS) | Co-chair and IUMRS past President | yfhan@buaa.edu.cn |
| Publications | Xiumei Wang (C-MRS) | member and young researcher (F) | xiumeiwang@tsinghua.edu.cn |
| (6) | Wuzong Zhou (UK) | member | wzhou@st-andrews.ac.uk |
| | George Zheng Chen (UK) | member | George.Chen@nottingham.ac.uk |
| | Chengtie Wu (C-MRS) | member | chengtiewu@mail.sic.ac.cn |
| | Tao Deng (C-MRS) | Co-chair | dengtao@sjtu.edu.cn |
| | Peter Wellmann (E-MRS) | Co-chair | peter.wellmann@fau.de |
| | Byungha Shin (MRS-K) | member | byungha@kaist.ac.kr |
| | Giovanni Marletta (E-MRS) | member | gmarletta@unict.it |
| D 1 | Sean Hearne (USA) | member and past President of MRS | hearnesj@ornl.gov |
| Development | Leticia Torres-Martinez (MRS-M) | member and past President of MRS-M (F) | lettorresg@yahoo.com |
| (11) | Tsong-Pyng Perng(MRS-T) | member | tpperng@mx.nthu.edu.tw |
| | Giuseppina Padeletti (E-MRS) | member (F) | gpadeletti@gmail.com |
| | Yudi Darma (MRS-Ina) | member | yudi@fi.itb.ac.id |
| | Chennupati Jagadish(A-MRS) | member and past President of (A-MRS) | Chennupati.Jagadish@anu.edu.au |
| | P. S. Anil Kumar (MRS-I) | member and Secretary of MRS-I | anil@physics.iisc.ernet.in |
| | Yuan Ping Feng (MRS-S) | Chair and IUMRS 2 nd VP | phyfyp@nus.edu.sg |
| | John Baglin (USA) | member and ISC liaison officer | baglin@us.ibm.com |
| Membership (8) | Joanne Etheridge (A-MRS) | member and President of A-MRS (F) | joanne.etheridge@monash.edu |
| | Do Kyun Kwon (MRS-K) | member | dkwon@kau.ac.kr |
| | Ian W. Boyd (E-MRS) | member | Ian.Boyd@brunel.ac.uk |
| | Santi Maensiri (MRS-Thai) | member and President of MRS-Thai | santimaensiri@g.sut.ac.th |
| | T. T. Song (MRS-T) | member | TTSONG@itri.org.tw |
| | Ziqiang Dong (C-MRS) | member | zqdong@shu.edu.cn |



1.5 Headquarter office location

1991-2012: 506 Keystone Drive Warrendale, Pennsylvania 15086, USA

2013-2018: 2220 Campus Drive, Evanston, Illinois, 60208, USA

2019-2020: 62 Zizhuyuan Road, Haidian District, Beijing 100048 China

2021- : School of Materials Science & Engineering, 50 Nanyang Avenue, Nanyang Technological Univer-

sity, BLKN4.1, #01-02a, Singapore 639798